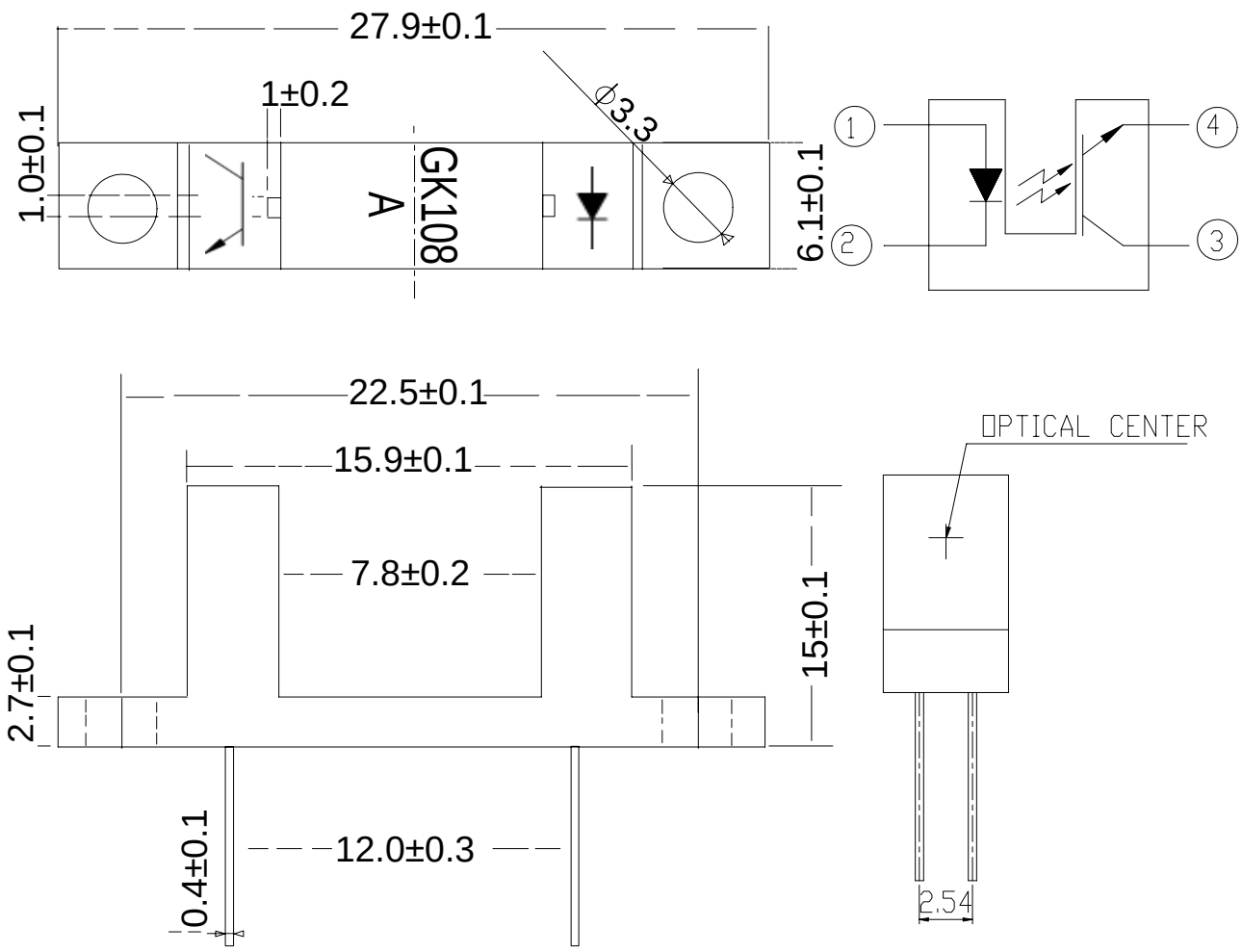
MODEL NO: DS-GK108A

■ Package Dimensions :



MODEL NO: DS-GK108A

■ Absolute Maximum Ratings (Ta=25℃)

Parameter		Symbol	Ratings	Unit
Input	Power Dissipation at(or below) 25℃ Free Air Temperature	Pd	75	mW
	Reverse Voltage	V_R	5	V
	Forward Current	I_F	50	mA
	Peak Forward Current Pulse width ≦100μs, Duty cycle=1%	I_{FP}	1	A
Output	Collector Power Dissipation	P_C	75	mW
	Collector Current	I_C	20	mA
	Collector-Emitter Voltage	V_{CEO}	30	V
	Emitter-Collector Voltage	V_{ECO}	5	V
Operating Temperature		Topr	-25~+85	℃
Storage Temperature		Tstg	-40~+85	℃
Lead Soldering Temperature (1/16 inch from body for 5 seconds)		Tsol	260	℃

■ Electro-Optical Characteristics (Ta=25℃)

Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Input	Forward Voltage	V_F	-	1.2	1.6	V	I_F=20mA
	Reverse Current	I_R	-	-	10	μA	V_R=5V
	Peak Wavelength	λ_P	-	940	-	nm	I_F=20mA
	View Angle	2θ1/2	-	60	-	Deg	I_F=20mA
Output	Collector Dark Current	I_{CEO}	-	-	100	nA	V_{CE}=10V
Transfer Characteristic	C-E Saturation Voltage	V_{CE}(sat)	-	-	0.4	V	I_C=0.5mA I_F=20mA
	Collector Current	I_C(ON)	0.9	4	15	mA	V_{CE}=5V I_F=20mA
	Rise time	t_r	-	20	-	μsec	V_{CE}=5V
	Fall time	t_f	-	20	-	μsec	I_C=1mA R_L=1KΩ

MODEL NO: DS-GK108A

■ Typical Characteristics For DR

Fig. 1 Forward Current vs. Ambient Temperature

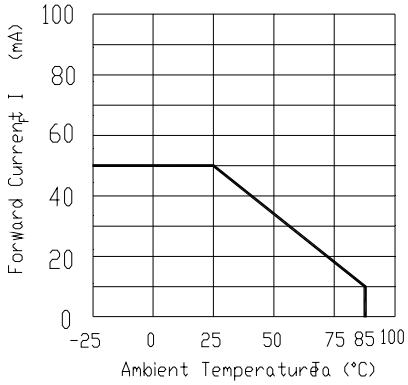


Fig. 2 Spectral Distribution

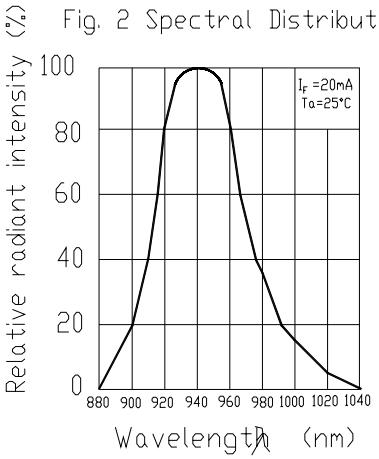


Fig. 3 Peak Emission Wavelength vs. Ambient Temperature

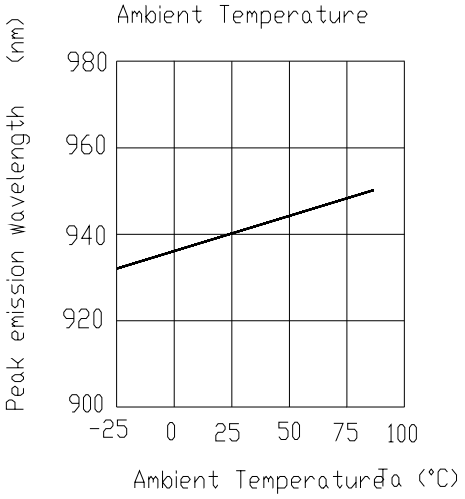


Fig. 4 Forward Current vs. Forward Voltage

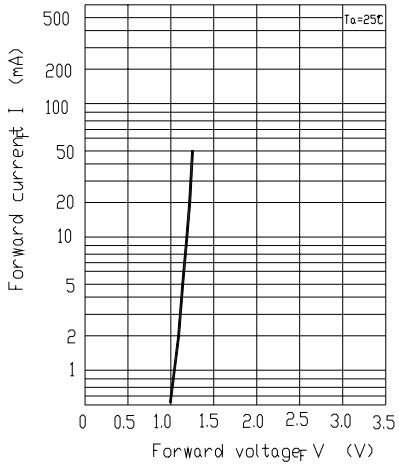


Fig. 5 Forward Voltage vs. Ambient Temperature

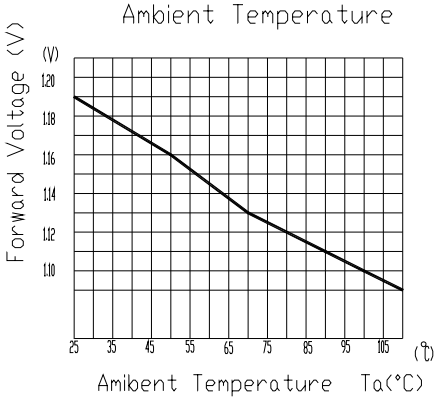
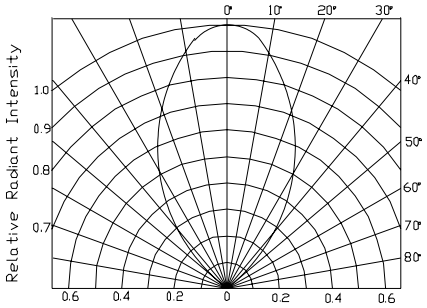


Fig. 6 Relative Radiant Intensity Angular Displacement



MODEL NO: DS-GK108A

■Typical Characteristics For DT

Fig.1 Collector Power Dissipation vs. Ambient Temperature

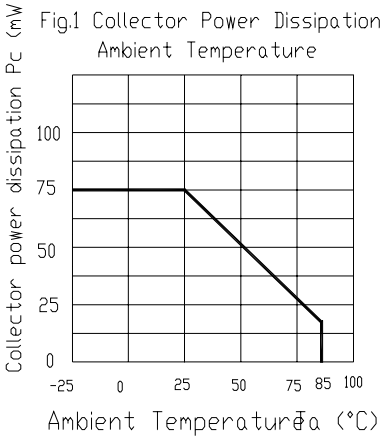


Fig.2 Collector Dark Current vs. Ambient Temperature

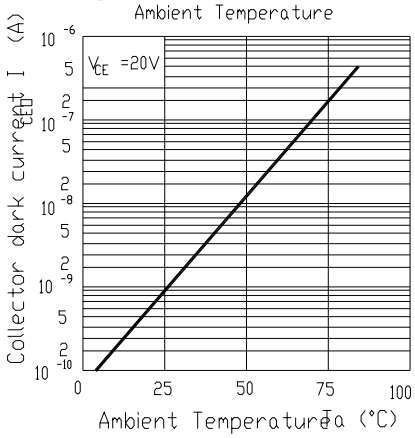


Fig.3 Spectral Sensitivity

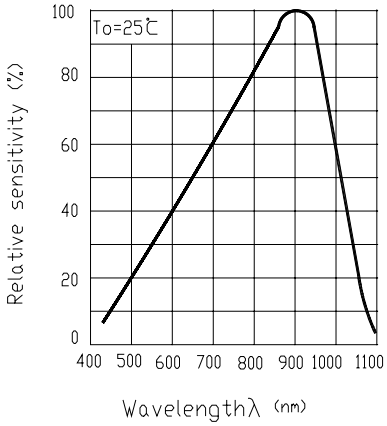
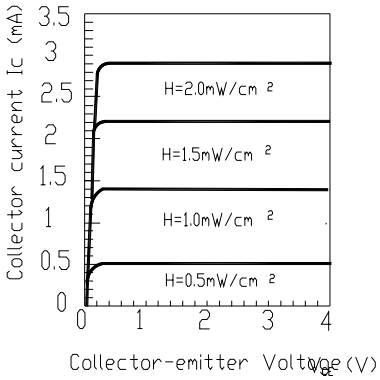


Fig.4 Collector Current vs. Collector-emitter Voltage



■Typical Characteristics For ITR

Fig.1 Relative Collector Current vs. Shield Distance(1)

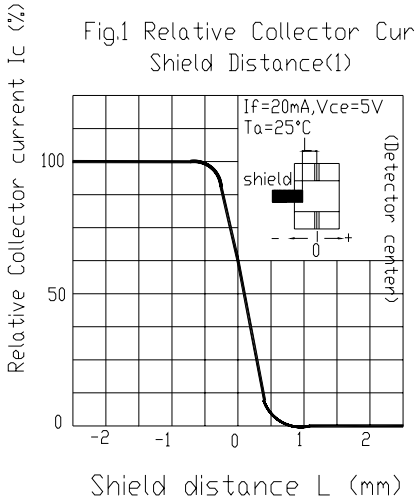


Fig.2 Relative Collector Current Shield Distance(2)